

**From:** Mike Mammarella  
**To:** Microsoft ATR  
**Date:** 1/28/02 11:10pm  
**Subject:** Microsoft Settlement

I believe that the terms of the revised proposed final judgement are too ambiguous; there is ample room for loopholes depending on the way Microsoft chooses to define, for instance, "digital rights management." Microsoft has recently received a patent for digital rights management operating systems, which means that it would be not unreasonable to claim that the entire operating system (of some future version of Windows) is a digital rights management system and therefore exempt from API disclosure.

The terms must be more well-defined, but also not so narrowly as to be specific to the technology of today. Microsoft will soon be boasting a new platform called ".NET", which could escape the terms of a too-narrowly defined "operating system" and therefore also be exempt from many of the terms of the judgement.

Furthermore, I believe that simply limiting Microsoft's illegal monopoly abuse is insufficient. Microsoft has been accused of the same practices before, and reprimanded as a result. However, this does not seem to have stopped Microsoft from continuing the abuse of its operating system monopoly. A more drastic measure could be in order; however this measure must be carefully considered.

I'd personally love to see Microsoft dissolved entirely for its support of proprietary PC hardware interfaces (see P.S.), but I realize that this is both unrealistic and uncalled for. However, a split between the operating system division and the software (and middleware) divisions would help to prevent future monopoly abuse; both companies would also be well placed in their respective markets from the beginning. There would need to be restrictions on their interaction, in order to prevent what happened to the AT&T fragments (they eventually joined together again) after that famous split.

This is not the only possible solution. Others include requiring the disclosure of some or all of Windows' source code, or that of Internet Explorer. These solutions could even be combined in full or partial strength.

I am certainly no legal expert, however as a software engineer and system administrator I feel I am qualified to make the statements I have put forth here. I hope that they will be of use and that the eventual decision will be beneficial to all involved, with the possible exception of Microsoft which can only stand to be in some way restrained from previous illegal activity.

Sincerely,

Mike Mammarella

P.S. A note about proprietary hardware interfaces - in the days of DOS, when a hardware manufacturer made a peripheral device, whether an adaptor card or a

printer, they disclosed information needed in order for the operating system or individual programs to communicate and use that device. With the advent of Windows and its driver interfaces, hardware manufacturers stopped releasing this information, claiming its proprietary nature. Technically, this was the decision of hardware vendors, but Microsoft was in the position to encourage them to continue to disclose their protocols and it instead encouraged the opposite. The effect of all this is that other operating systems cannot support these devices unless the manufacturer writes a driver for that operating system as well, which due to Microsoft's monopoly is much less likely. This further increases the barriers for entry into the operating system market.